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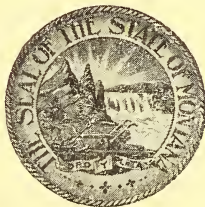
SECOND

ANNUAL REPORT

OF

VOCATIONAL EDUCATION

1919 - 1920



DEPARTMENT OF VOCATIONAL EDUCATION

HELENA

— 1920 —

MONTANA

INDEPENDENT



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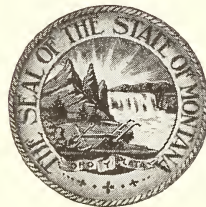
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DEPARTMENT OF VOCATIONAL EDUCATION

HELENA

— 1920 —

MONTANA

DIRECTORY

State Board of Education

EX-OFFICIO

Governor S. V. Stewart, President
Attorney General S. C. Ford
Superintendent May Trumper, Secretary

APPOINTED

William S. Bole, Great Falls.....	Term Expires Feb., 1920
C. H. Hall, Missoula.....	Term Expires Feb., 1922
J. Bruce Kremer, Butte.....	Term Expires Feb., 1922
Leo H. Faust, Libby.....	Term Expires Feb., 1923
Ward H. Nye, Billings.....	Term Expires Feb., 1923
W. S. Hartman, Bozeman.....	Term Expires Feb., 1920
John Dietrich, Helena.....	Term Expires Feb., 1921
A. L. Stone, Dillon.....	Term Expires Feb., 1921

Quarterly Meetings, first Monday in April, July, September
and December.

VOCATIONAL EDUCATION STAFF

May Trumper, Superintendent of Public Instruction
L. R. Foote, State Director of Vocational Education
M. J. Abbey, Supervisor of Agricultural Education
Lucile Reynolds, Supervisor of Home Economics Education
L. R. Foote, Supervisor of Trade and Industrial Education

FOREWORD

The following report has been prepared by Mr. L. R. Foote, who resigned his position as State Director of Vocational Education July 1, 1920, to accept a more attractive position at Lander, Wyoming.

The report covers the two school years 1918-19 and 1919-20 and in comparison with the report of 1917-18 indicates conclusively that vocational education is making steady progress in the state. The beginnings of part time and continuation school work during 1919-20 particularly give promise of rapid and satisfactory development under the guidance of Mr. G. B. Edwards, who succeeded Mr. Foote as State Director of Vocational Education, August 1, 1920.

MAY TRUMPER, Chairman,
Committee for Vocational Education.

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ANNUAL REPORT OF DIRECTOR

The report for 1917-18 was chiefly on Agricultural education since very little had been done in any other line. In 1918-19 no report was written. For the year 1919-20 tables III to IX give the expenditure of funds and tables X to XVI give the statistics of attendance in the various schools and teacher training institutions which were recognized and reimbursed for Vocational Education.

The allotment to Montana by the Federal Board for Vocational Education for the year ending June 30th, 1919, was \$15,000, which was divided as follows:

\$ 5,000	for the salaries of supervisors and teachers of agriculture
5,000	for the salaries of teachers of trade and home economics and industry
5,000	for the training of teachers.

\$15,000

Total Federal Funds for the year ending June 30, 1920; the allotment to Montana was:

\$ 5,000	for salaries of supervisors and teachers of agriculture
5,000	for the salaries of teachers of home economics and trade industry
10,000	for Teacher Training

\$20,000 Total Federal Funds.

The State of Montana through its legislature of 1917 met by appropriation the allotment from federal funds for the year 1918-19 by an equal amount or \$15,000. The legislature of 1919 appropriated \$21,500 for each of the two years 1919-20 and 1920-21 for Vocational education to meet the Federal allotment.

Statistics alone without explanation or description seldom tell the whole story. For this reason this report contains descriptions of the work done by each of the supervisors in agriculture, home economics and trade and industrial education.

The phenomenal progress which has been made in agricultural education in high schools in the past three years is traceable largely to the impetus given to it by the Smith-Hughes Act. In the spring of 1917 Montana had but three agricultural schools, which did not enroll 100 students. Through the efforts of Mr. Abbey, who has been Supervisor of Agricultural Education since that time, nine schools have been recognized and reimbursed and fourteen others were recognized but could not be reimbursed in full or even in part for the salaries of their teachers because of insufficient funds. The demands for next year for teachers of agriculture and for the organization of courses which are recognizable as vocational show that as many as forty schools hope to qualify in full or in part for this work. The appropriations from the state have been inadequate to assist these districts in establishing courses and with the rapidly rising salaries which must be paid to agricultural teachers if these courses shall be maintained in at least one progressive high school in every county, demand that some financial assistance be rendered such schools from other sources than their own district.

The report of the supervisor of Home Economics, who has been employed for the first time this year, shows that thirty schools were visited and that there are fully as many more in which some type of Home Economics work is being given. Frequently the work in Home Economics as given in high schools is without a particular motive and has been given more for the purpose of exploring in Home Economic sub-

jects than for the purpose of organizing the work so as to prepare a girl for home making. More schools than four which have been recognized and reimbursed could have been reimbursed if there had been more than \$2,000, the amount of state and federal money available for this department of secondary Vocational Education.

There is one field of Home Economics we have been unable to touch and in which much worth while work could be done. No effort has been made by the director or the supervisor to organize evening classes in Home Economics because there were no funds available with which we could assist in the payment of salaries of the teachers. Almost any community in the state, however large or small, could have maintained one or many short unit evening classes for women, and working girls in some Home Economics subjects, such as the Preparation of a Meal, Child Care, Home Nursing, Making of Simple Garments, House Decoration, Home Milinery, etc., if there could have been any way to finance and direct the work. There is pending before Congress a bill which would increase Montana's apportionment for Home Economics by \$4,000. This, with an equal appropriation from the state, would give Montana \$10,000 for Home Economics and would, in a large measure, solve the problem of short unit evening courses for women.

Summer Conference.

A summer conference on Vocational Education for superintendents, principals and teachers in Montana was called at Bozeman in connection with the summer school of the State College by the Director of Vocational Education July 24, 25 and 26, 1919. Federal Regional Agents Frank Cushman for Trade and Industrial Education, and C. V. Williams for Agricultural Education were present; also L. A. Carris, Acting Chief, Division of Vocational Education, of the Federal Board. Special attention was given to Vocational Education, its meaning and its purpose as it affects part time and general continuation schools and agricultural education. Following the general conference State Supervisor M. J. Abbey with the Regional Agent Williams conducted a school of methods for the agricultural teachers of the various recognized vocational courses in high schools of the state.

Part-Time Schools.

The Montana legislature of 1919 amended the school laws by adding a chapter creating part-time and general continuation school compulsory in first class districts provided fifteen children of the ages 14-15-16-17 are found who are out of school and not high school graduates. Previous to the enactment of this law no census of any district had been taken of any children amenable to the law and there was very little data to work upon, yet it was believed from the experience of cities in other states there was a need in Montana for such a type of school and that more than fifteen children would be found in every first class district who should be in the part-time school. One city, Missoula, made a systematic effort and canvassed its school census list to ascertain the number of children of the part-time school age. It had been stated that there would not be fifteen children in the city of Missoula who were of this age and out of school. The method of the canvass was by taking the school census and striking from it the names of all children of the ages 14-15-16-17 in the grade schools, in the high school, in private and parochial schools, and from the remaining list those who were attending schools outside the city of Missoula. After this careful checking was completed there were found 105 in a school census of 3,485 who were not in school and were amenable to the part-time school law. This city would naturally have a high percentage of school attendance on account of the influence which the State University has in the city. Taking Missoula as a high average of excellent attendance the following chart has been worked out.



Part-time Class in Printing—Butte. O. G. Wood, Instructor

Part-Time Survey.

	School Census 1919	Students 14-15-16-17	Out of school
Missoula	3,485	861†	105
Anaconda*	2,722	901†	*112
Billings*	3,513	870†	109
Butte*	14,462	3,385†	423
Great Falls*	6,119	1,527†	191
Helena*	3,109	799†	100
Lewistown*	2,557	660†	82
			<hr/> 1,122

*Estimated from Missoula which was accurately taken.

†Counted out from census as reported.

It will be seen that the part-time students out of school in the Missoula district is about 1-32 of the school census. Using this as a ratio the total number of children in the first class districts of the state would be approximately 1,122, a fairly good sized school in itself.

The law has no specified penalty upon districts which fail, after ascertaining their need for a part-time school, to inaugurate such a school and it is probably just as well, for there are school men who do not yet see the need of such a school nor do they see how such a school would benefit pupils who were compelled to attend it. What they might do in trying to carry out the provisions of the law would be more harmful than if they knew more of the part-time school and were more in sympathy with it.

The Director would recommend that two sections be added to the law. One recommendation is that the provisions of the part-time law be extended to the second class school districts which may voluntarily invoke the aid of the law for the establishment of such schools when a need has been found. Another section which should be added is that

both first and second class districts be required to take a continuing part-time census of pupils amenable to the law and to make a sworn report to the State Superintendent of Public Instruction and that for failure to do so within a specified time the district be penalized by the state withholding a certain amount of state money apportioned to that district for maintaining schools.

The Director would further recommend that parts of the compulsory school laws be entirely rewritten especially Sections 1100, 1101 and 1102 in order that the apparent and conflicting ambiguity of Sections 1100 and 1102 be removed.

Three of the seven first class districts established part-time schools. Butte established its part-time school in September shortly after the opening of the regular schools. Billings and the Fergus County High School began in January and February, respectively. Missoula would have established this school but the law is not sufficiently explicit upon which school, the county high school or the district high school, shall fall the duty of establishing the school and consequently although the survey had been taken the part-time school was not established. Here again the law should be amended to remove this conflicting authority or lack of responsibility. Helena, Anaconda, and Great Falls make no reports of establishing part-time schools.

Some difficulty has arisen over evening attendance at public or private schools as to whether this may not be substituted for day part-time attendance. Two objections stand out quite clearly against this. First, the part-time student is too young after a day's work to be required to attend night school, and second, the attendance of a private night school would reduce his wages (since he secures his permit to work for the sake of wages) by the amount of tuition he would have to pay, consequently it would be about as well for him to attend a regular day school. There, however, might be some justification in favor of the 17 year old students, attending evening school who was earning a man's or a woman's wage and whose occupation made it impossible for the attendance upon the day school.

Advisory Committee.

By act of the legislature of 1919 an advisory committee for Vocational Education was created consisting of five members, one representing agricultural interests, one manufacturing and commercial interests, one skilled labor, one home making interests and the superintendent of public instruction. The committee appointed by the State Board of Education consists of George A. Lewis, Manhattan, Representing Agricultural Interests; W. A. Turnbull, representing manufacturing and commercial interests, Butte; A. R. Gaskill, Helena, representing skilled labor; Mrs. Elva G. Hall, Dixon, representing home making interests and Miss May Trumper, State Superintendent of Public Instruction.

Two committee meetings were held this year and the following recommendations were submitted to the State Board of Education: First, that the State Board of Education be requested to endorse the Fess Bill before Congress, being H. R. 12078 for the promotion and encouragement of Home Economics Education and to urge each Montana Congressman to labor for its passage. Second, that certain amendments be made to the Montana Plans for Vocational Education being particularly the employment of an itinerant teacher trainer in Trade and Industry and that training of teachers for trade and industrial education at the State College be discontinued during three-quarters of the year and be maintained only during the summer quarter. Third, that the State Board of Education be advised that in order to promote Vocational Education of a grade below that of college in such a manner as the needs of the state demand in the lines of agriculture, trade and industry and home economics more adequate financial support should be provided. The Advisory Committee urges upon the State Board

of Education the need of taking such action as will look toward securing support to Vocational Education through the State Legislature by meeting and exceeding federal appropriations for Vocational Education. Each item was endorsed and approved by the State Board of Education.

Summary Commercial Occupations Survey Children 14-15-16-17.

Under the direction of Mr. E. R. Sanford a commercial occupation survey was conducted in the city of Missoula to ascertain the number of children of each age of the part-time school age at work and the occupation in which they were employed. The total number of children was found to be 3, 14 years old; 9, 15 years old; 11, 16 years old, and 30, 17 years old; a total of 53; 36 boys and 17 girls. Those children employed in agriculture or domestic service were not counted.

The occupations with the number in each are as follows:

Messengers, boys	17
General Clerk, girl	1
Cashier, girl	1
Shipping Clerks, boys	3
Stock Clerks, boys	2
Switchboard Operators, girls	5
File Clerk, boy	1
Bundle Wrapper, girl	1
Delivery Wagon Driver, boy	1
Entry Clerks, girls	3
Salesman (Retail Store), 2 boys, 9 girls	11
Calculating Machine Operator, girl	1
Order Clerk, boy	1
Bell Boys, boys	5

REPORT OF STATE SUPERVISOR OF AGRICULTURE

By MR. M. J. ABBEY.

Growth of Agricultural Instruction.

In 1918-19 nine schools gave instruction in Vocational Agriculture. The courses extended over a period of one year. Three schools gave semester courses in general agriculture of the non-vocational type. During the year 1919-20, twenty-two schools met all the requirements of the State and Federal Acts for Vocational Agriculture. In addition to these twenty-two schools, fourteen schools offered non-vocational courses.

Since April 1st, 1920, the State Supervisor has been requested to recommend approximately forty men to forty different schools that are contemplating adding vocational courses in agriculture for the year 1920-21. The present shortage of qualified agricultural instructors will limit the number of new schools to not more than twenty. This shortage of trained men is fast being met by the Montana State College and the colleges of other states.

Character of Instruction.

The aim and method of instruction in each school is to establish a uniform system of vocational instruction in agriculture, such a system that it will be effective in establishing efficient standards of production and conservation on the farm. This means that the selection of subject matter and method of presentation shall be such that the information gained shall be available for actual and immediate use on the farm. In all sections of Montana we find a large number of young men who are out of schools actually engaged in farming operations. To meet the needs of this class of young people, an effort has been made which has resulted in a large number of young men above the average high school age returning to school.

For the first year the agricultural instruction is confined entirely to animal industry, farm shop work and project work. In the succeeding years, crops, soils, dairying, farm management, gas engines and practical experience on the farm are required. Each student is required to spend one-half of his entire school day in agricultural work. The remaining part of the student's time is spent in pursuing work which will add to a vocational intelligence. Both in the agricultural work and the general school work an atmosphere of productive work surrounds the conditions under which the instruction is given. Out of such an environment will grow habits of orderliness, thrift, industry and co-operation which are necessary to successful farming. The activities of the instructor and his department are not confined to the classroom.

As mentioned above, twenty-two schools met all the requirements of the state and federal acts for the promotion of vocational education. We have selected the reports of three of these schools as typical of the work accomplished the past year. The first report is from one of the nine schools that receives state and federal reimbursement, the second and third from schools that qualified as vocational schools but received no reimbursement as funds were not available.

The Jefferson County High School.

A. T. Peterson—Principal.

W. G. Hunter—Instructor.

In the early spring of 1919 the instructor sent for a set of government slides and gave some lectures on beef cattle in Clancy and Jefferson City. This resulted in organizing two associations. As a result of the educational campaign of letters and lectures with which he had preceded the organizing, the two associations have each adopted one breed of cattle and only registered bulls of those breeds will be allowed on the range controlled by the associations. This will mean rapid improving and standardizing of the product of the range. One of the associations has asked me to pass on all the bulls before they are turned



Members Farmers' Short Course—Sidney High School, Sidney, Montana
J. L. Nevins, Supt.

out this spring. This will be several days work but the benefits will more than justify it. The instructor has organized another stock association and publicity work with a second association was started this winter. At the present time we are working to get a car load of registered cattle shipped into the Clancy district and are in hopes of getting a Calf Club, the members all to have registered calves of one breed.

DRAINAGE:

Near Boulder there is a tract of land of about 1,300 acres which needs drainage. We secured some slides, called a meeting of the land owners and gave a lecture on drainage of that particular swamp, offering to have a Federal Engineer come and give us his advice as to methods to be adopted. This was followed by several articles in the local papers. My final article in July was a comparative estimate of the value of the marsh hay which is now harvested and the value of clover and timothy which could be harvested if the land were drained. Like all new movements our efforts were not appreciated by all parties. It is a big co-operative proposition and requires time.

HAY:

The last week of July and the first week of August was spent in trying to organize a shipping association or to get a group of farmers to go into Minnesota and put up hay and ship it into this country for themselves and to sell to the neighbors who wanted to buy. Due to the financial condition of the farmers at that time and other causes it was impossible to get enough to go into the proposition to make it pay. We had several meetings in various parts of the county but the object failed. The fact that we were trying hard to help them has made us popular with the farmers.

We then let the hay matter drop until November when we learned that Minnesota Upland was selling at \$35 per ton locally. We announced this fact and hay dropped to \$24. We sent out a circular letter offering to give the names of the Minnesota shippers to any one who wanted them. We must have received between fifty and 100 inquiries, many of them being for a whole neighborhood.

STOCK JUDGING:

The latter part of August was spent in coaching a stock judging team. The representatives from here were the State winners. This fall we expect to have Club teams as well as High School teams at the State Fair.

RAILROAD:

Part of the county needs a railroad very badly. Some have to haul their grain from fifteen to thirty miles to market. In July, we made a survey of about two townships to determine the amount of tillable land and the number of farmers. We submitted these figures to the Northern Pacific Railroad and a short time ago the General Freight and Passenger Agent was out here to get additional information to submit to the higher authorities of the company. The building of a road up the Boulder Valley from Cardwell to Boulder will mean wonderful things for the Agricultural industry of the central part of the County.

GOPHER POISON:

Gopher Poison Campaign was carried into several communities last season. In December, we sent out petition blanks to several farmers to have them circulated, which petitioned the County Commissioners to compel every land owner to poison his gophers; the Commissioners acted favorably. With our present organization an active campaign will be carried on in each community this year. There seems to be a great deal of interest in the work this spring.

CLUB WORK:

The club work in the past has not been up to the standard that we anticipated. Many individuals have done good work but have not had the backing of parents and the local organizations which are necessary. Last spring we decided that the best way to get this was to do as much as possible with the adults and create a greater interest in my work. With the railroad work, the live stock work, gopher poison work, the farmers' exchange, and the hay work we have the necessary cooperation. Our efforts this spring will be to get more parents behind the Club Work.

SEED:

We missed a good chance to do some good work in getting seed for the farmers. Last fall when we should have been working on the matter, we were of the opinion that the county would have to be bonded before we could bring in seed grain. At Christmas time we learned that it would not be necessary to bond the county but we failed to get the required amount of support in the short time left.

SILO CAMPAIGN:

We secured the use of three government films, two on silo construction and had scheduled eighteen meetings in different parts of the county. On our way to the first meeting, we stopped at a farmhouse, a few minutes later the car accidentally caught fire and contents (films, battery and machine) were burned up. My plan was to put on an educational campaign in favor of silos. We have followed the plan up by sending out bulletins and letters giving the benefits of silos. This spring we are offering to have the class in shop work build a silo for any farmer near the school who will furnish the material. As yet we have not found any one who will take up the offer, but the effects of the offer will be seen in the future. We plan on having small meetings on silo construction during the summer.

FARM BUREAU:

In October we made an effort to get an organization of farmers from different parts of the county with whom we could work and thus make our work more effective. We called a meeting of representative farmers from different parts of the county by letter. In the letter

we gave a list of topics that would be discussed, among them, the Farm Bureau. A storm prevented the meeting from being well attended, but as a result the Whitehall people are making a strong effort to get a Farm Bureau.

CROP DEMONSTRATIONS:

In January, we wrote letters and sent out bulletins on some of the crops that we thought should be tried out in this county. As a result there will be a number of crop demonstrations carried on this year by farmers on their farms.

AGRICULTURAL CLUB:

The interest in the Agricultural class has increased so rapidly, and to a far greater extent than I had expected, that we have organized a club. The boys of the club talk about better methods of farming to the farmers. Each one has written to one of more young men who are not in school telling him about our club and about his project and asking him to take a project also, under the guidance of agricultural instructor. In the summer they are going to exert efforts to get more boys to come in to school and take agriculture in the fall. We intend to follow this up by calling on all the young men that they have written to. Most of the boys are going into projects on a large enough scale and with the hopes of selling \$1,000.00 worth of crops. If several are successful in this we will perhaps change the name of the club to the Thousand Dollar Club.

WINTER SCHOOL:

We spent a considerable amount of time in getting students into the winter school. Only two students were secured but with the exception of the small number, the school has been very successful. One student left at the end of two months and the other student is still attending school.

We have prepared articles for the local and county papers. They have practically all been for the improving of county conditions.

PLANS:

Besides the plans mentioned in connection with the foregoing topics, we intend to get slides and films and give lectures on crops, silos, and tillage methods during the summer; train two or three judging teams for the State Fair; have some local fairs; start a big poultry campaign in the fall; build a poultry house on the school grounds and keep some good laying hens next winter, publishing the results as to eggs and feed every month. We expect to start some community work at several centers.

The Chinook District High School.

J. B. Tucker—Principal.

Glen C. Smith—Instructor.

Animal Husbandry	12	Pupils
Soils and Crops	6	Pupils
Farm Management	9	Pupils
Farm Carpentry	12	Pupils
Rural Sociology	6	Pupils
Project Workers	12	Pupils
Trips to get students	18	
Trips with students	63	
Visits from farmers	19	
Seed tested for germination	52	samples
Milk tested for farmers	27	samples
Dairy herds tested	2	
Soil surveys	1	
Letters written	1987	
Miles traveled by car	2600	
Addresses given on vocational work	1	
Pure Bred Poultry Association formed	1	
Chester White Breeders Association formed and one boar purchased.		

Six weeks short course in Agriculture, Gas Engines and Forge work, attendance, 428.

Night school in Auto Management for eight nights, average nightly attendance, 24.

During the short course five autos, two engines, and two magnetos were overhauled. Instruction in welding, bending, tempering and work of iron was given.

A School Garden of two acres was cared for; although put in quite late, it netted \$75.

In the Farm Carpentry Class, two basket hay racks and one dray box, twelve chicken coops, besides milk stools, wagon jacks, pig troughs, hot bed frames, self feeders for hogs, self feeders for chickens, nail boxes, bench vises, feeding racks, etc., were made.

A 220 egg incubator was run twice. Twelve hundred plants were raised for Club and Project gardens. A hot bed and cold frame made.

Cooperated with the County Agent and Home Demonstration Agent in the following:

1. Holding eight Community Club Fairs.
2. Holding a County Club Fair and Pure Bred Stock Sale. At the sale the Hereford Bulls averaged \$257.00 and the Chester White Gilts \$87; attendance 600.
3. Holding a Boys' and Girls' Club Camp; entertained ninety boys and girls for three days.
4. Holding a Farmers' Institute for three days; attendance 367.

PLANS FOR THE FUTURE:

Maintaining a seven acre garden and demonstration plot.

Building a greenhouse and poultry house.

Establishing a marketing bureau.

- Purchasing a projection lantern to help in giving lectures in the rural communities.

Establishing an eighteen week short course in gas engines, farm mechanics, automobiles, dairying, crops and animal husbandry.

Establishing a course in harness and shoe repairing.

Holding a Thresher's School.

PLANS FOR CLUB WORK:

Organize only pure bred live stock clubs, excepting the sheep club.

The following live stock Clubs will be formed: Hereford, Shorthorn, Holstein, Chester White Pig Club, Sow and Litter Club, Poultry Club.

The members of the Pig Clubs must raise corn.

All clubs are organized on the community basis, with a local leader in charge.

Community Fairs will be held as well as County Club Fair and Live Stock Sale. A Boys' and Girls' Camp will be held.

Poplar District High School.

Frank Mitchell—Superintendent.

John Dexter—Instructor.

The State Supervisor recently visited the Poplar School and submitted the following report to the State Director for Vocational Education.

"The work done at the Poplar high school was of particular interest to us. This is due largely to the fact that conditions at this school are somewhat different than at the other schools. Poplar is located on the Fort Peck Indian Reservation. The Indian problem in the school has to be met. As soon as the Indians receive their land patents, they become citizens and are entitled to send their children to the public schools. Quite a large percentage of the boys and girls in the Poplar School come from Indian homes. Few men have made a more thorough study of the Indian educational problem than Supt. Frank Mitchell. He believes and puts into practice the theory that productive vocational work directly related to the farm and home is the solution of interest-

ing and holding these new citizens in the school. Our interest in the school was on the agricultural side. During the summer, Supt. Mitchell made a thorough canvas of the county, pointing out to whites and reds alike that a department of agriculture had been established in the high school which would be open to any young men above fourteen years of age and qualified to do the work. As a result, on the opening day of school fourteen young men presented themselves for registration. Several of these young men had been out of school for some time and had given up the idea of finishing a school course.

The Supervisor believes in getting information first hand. Consequently, he took charge of the class a part of two periods. After the first few minutes, the young men were at home and readily answered all questions asked. In fact many of the boys were willing to state facts regarding their training and ambitions that we little hoped to obtain. During the two days spent at the school we had personal conferences in which many interesting facts were brought out. Thirteen of a class of fourteen came directly from the farm. Ten stated that they had no other ambition than to go back to the farm when they had gotten all the high school could give. "I did not think there was so much to know about stock until I began to study this work." "I want to know all about machinery on the farm." "School is different this year than when I was in school before." "My father is as much interested in the work as I am." "I would like to go to Bozeman; do you think I could get in?" (An Indian boy.) Other answers were equally interesting. Mr. Dexter, the instructor shares Supt. Mitchell's enthusiasm and is working not only with the boys in school, but with their parents. Each week the local newspaper carries a special article by Mr. Dexter on some phase of farming which is of general interest. These articles are read by farmers of the county. Several farmers mentioned to us an article on alfalfa which Mr. Dexter had prepared. It was our privilege to address two community meetings, thirty and thirty-five miles from Poplar. Many of the farmers were sending their boys and girls to the Poplar School. A remark made by one was typical of other remarks: "We are back of our high school." The County Superintendent, Mrs. McFarlan, one time teacher in the Poplar Schools, is giving her most hearty support to the work which Supt. Mitchell and Mr. Dexter are doing. No small credit is due the Board of Education. It may well be said of the Poplar School that it renders service."

The distinctive features of other schools are: Powell County High School installed incubators with a capacity of 1,600 eggs. Chicks were distributed throughout the county. A complete dairy equipment was installed and more than 2,000 pounds of butter was made. The Flathead County High School purchased pure bred dairy calves in the State of Washington and bred ewes in Montana and distributed them to project members. The Gallatin County High School, Sidney District High School, Belt District High School, Hamilton District High School, cooperated with the County Farm Bureau in pure bred live stock campaigns. The Columbus District High School, Dawson County High School, Harlowton District High School emphasized poultry production. The Wibaux County High School, Fergus County High School, Granite County High School, Polson District High School, Cascade District High School cooperated in gopher poison work. Other schools doing a similar work are: Beaverhead County High School, Hardin District High School, Worden District High School, Ismay District High School, Fairview District High School.

CHANGE OF INSTRUCTORS:

It is recognized that the efficient agricultural instructor is in line for promotion in other lines of agricultural work. Higher salaries paid in County Agent work, managing ranches and opportunities in commercial work are attractive to most vocational instructors. During the year 1919-20 we lost six of our most valuable men. Nelson Graves

of the Belt School resigned to accept a position with the State Nursery Company, Paul C. C. Wagner of the Harlowton School became manager of a ranch in Wheatland County. H. L. DePue of the Sidney School became County Agent in Richland County. C. A. Lodge of the Dawson County High School resigned to become County Agent in the State of Washington. George Cooley of the Philipsburg school and J. E. Border of the Gallatin County High School purchased farms. In each case the men resigned to better themselves financially. Their places were filled without any delay and by men that had made a special preparation for vocational teaching.

COURSE OF STUDY.

The course of study is uniform in all of the vocational schools. During the first year the student spends ninety minutes per day in the study of problems of animal production. Local conditions in a community form the starting point of instruction. The need of pure bred live stock, methods of care and management, judging, buying and selling live stock are emphasized. Ninety minutes per day are spent in farm shop work. The students make in the farm shops such articles as wagon boxes, hay racks, wagon jacks, brooders, incubators, step ladders, automatic feeders, gates, concrete posts, rope tying, harness repair, riveting, sharpening saws, chisels, bits, axes, scythes, soldering, and riveting are emphasized. During succeeding years crops, soils, poultry, dairying, farm management, gas engines are taken up.

Four Years' Course

FIRST YEAR.

Vocational:

Live Stock Production and Management.
Farm Shop Work (Woodwork).
Project Work.

Non-Vocational—Two Units:

English.
Elective.

SECOND YEAR.

Vocational:

Crop Production and Soils.
Farm Shop Work.
(Woodwork and Iron).
Project Work.

Non-Vocational—Two Units:

English.
Elective.

THIRD YEAR.

Vocational:

Farm Machinery, Motors and Tractors.
Project Work.
Choice of Any Two:
Dairying.
Poultry.
Vegetable Gardening.
Fruit Growing.

Non-Vocational—Two Units:

English.
Industrial History.

FOURTH YEAR.

Vocational:

Farm Management and Marketing.
Problems in Farm Accounts.
Soil Surveys.
Rural Economics and Rural Sociology.
Project Work.

Non-Vocational—Two Units:

English.
Electives from the Third Year.

Short Course.

Schools qualifying as Vocational Agricultural Schools must maintain each year a short course of such subjects and length as to meet the needs of the community, such a course to be of not less than six weeks and subjects to be selected from the four years' course in Agriculture and taught in an intensive manner.

PROJECT WORK.

One of the distinctive features of vocational agriculture is that each student shall have an opportunity and be required to take part in productive activities. Each student is given an opportunity to select a productive project most to his personal liking and which offers an

opportunity for financial returns. At all times this project is under the direction of the instructor who visits the project member frequently. Classroom instruction is thus put into immediate and actual practice. The following general principles govern:

1. There must be a plan for work at home covering a season of sufficient length which will enable the member to receive ample financial returns for his time and efforts.
2. The project must be a part of the instruction in Agriculture at the school.
3. The problem must be more or less new to the pupil.
4. The student, parents and instructors sign an agreement as to the work to be done and the method.
5. The supervision of the project is under the high school instructor.
6. Detailed records of time, methods, cost and income must be kept and submitted to the instructor in the fall.
7. An itemized report based upon the record must be submitted to the State Supervisor.

The projects for the year 1919-20 were beef cattle, dairy cattle, sheep, hogs, alfalfa, wheat, corn, poultry, garden and potatoes. Notwithstanding the drouth conditions the total proceeds from nine schools were \$5,969.56.

EXTENDING THE INFLUENCE OF THE SCHOOL.

A department of agriculture to be of most service to the community must extend its influence beyond the classroom. In fact, a school that confines itself to the school building is not laying a foundation that will merit the future support of taxpayers. We recognize that to establish and maintain a department of agriculture means an extra expense. This extra expense will be willingly borne by those who support a school, provided that the school renders service in return. During the past year the various schools extended their usefulness in the following ways: In cooperation with the Extension Department of the State Agricultural College, Farmers' Short Courses were held; unit courses in Agriculture; cooperated in Farm Bureau campaigns, organizing and supervising Boys' and Girls' Club work; organizing better live stock associations; furnishing to farmers plans for farm buildings; bringing pure bred live stock into the county; vaccinating live stock; conducting community meetings in the interest of better farming methods; illustrated lectures; cooperating with the County Superintendent in her campaigns; testing seeds; testing milk; testing soil; assisting farmers in keeping records; conducting one day institutes in different parts of the county. Acting as a distributor of gopher poison; giving gopher poison demonstrations; putting on poultry shows; newspaper articles bearing upon what is done at the school or in the county. Leading the people of the county to look for assistance—the acid test of a school is the service which it renders.

REPORT OF HOME ECONOMICS SUPERVISION FOR 1919-20.

By LUCILE REYNOLDS.

State Supervisor

For the years 1917-18 and 1918-19 the State Department of Education secured the loan of an extension worker from the Extension Department at the State College to supervise the high schools offering Smith-Hughes courses in Home Economics. For the year 1919-20 a woman was employed for one-third time work as State Supervisor of Home Economics Education. The other two-thirds of her time was spent as a state worker in the Extension Department of the State College. The months of September, December, March and June were set aside for supervisory work. Practically all of the months of September, December and March were spent in field supervision. The month of June was spent in the office of the Vocational Director preparing the annual report and outlining plans for 1920-21. In arranging for the schools to be supervised it was decided last September to write to all of the high schools in the State that offered Home Economics work and give them the opportunity to secure the services of the State Supervisor. Only those schools that requested supervision were visited, but even with this arrangement it was impossible to reach all who asked for supervision. Following is a list of the high schools visited:

COUNTY HIGH SCHOOLS:

Broadwater, Carbon, Custer, Dawson, Fergus, Flathead, Gallatin, Granite, Missoula, Powell, Sweet Grass, Teton and Wibaux.

*DISTRICT HIGH SCHOOLS:

Butte, Cascade, Columbia Falls, Columbus, Cut Bank, Fromberg, Great Falls, Hamilton, Hardin, Harlowton, Havre, Hysham, Laurel, Lavina, Libby, Sidney, Thompson Falls, Worden.

The following schools qualified for Smith-Hughes work for 1919-20 and were reimbursed from State and Federal funds: Dawson County High School, Glendive; Fergus County High School, Lewistown; Gallatin County High School, Bozeman, and Wibaux County High School, Wibaux.

This is the third year that Fergus and Gallatin County High Schools have qualified, the second year for Wibaux County and the first year for Dawson County.

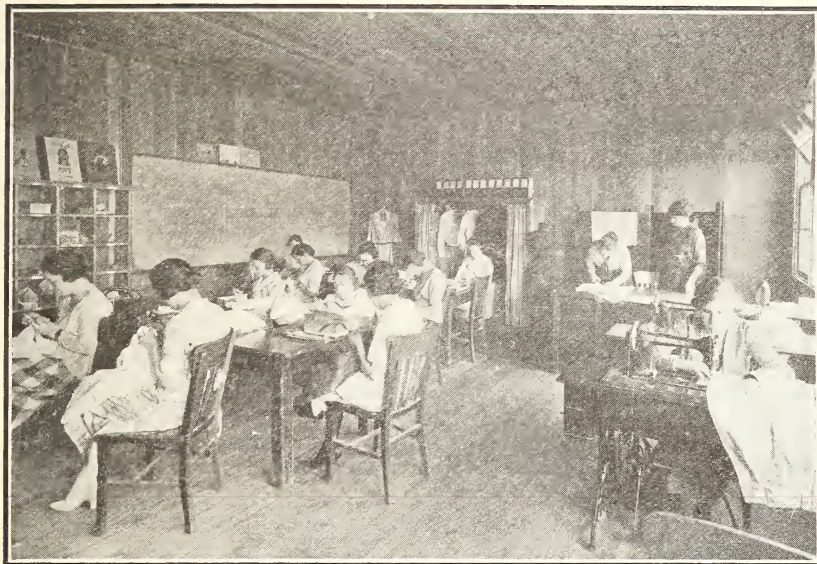
Flathead County High School qualified for 1917-18 and for 1918-19. This year, 1919-20, because of the fact that the school did not have sufficient teaching force to segregate the Smith-Hughes students from the other students enrolled in Home Economics, it was impossible for the school to qualify.

Summaries of Smith-Hughes Schools for 1919-20

Dawson County High School offered Smith-Hughes Home Economics for first and second year. The course of study suggested in Form 44 (See Montana State Plans for Vocational Education) was used. The related art work was taught by the home economics teacher, the general science by the science teacher. Since only one teacher was employed it was impossible to offer more than two years of home economics. The interest in the work this year has been very keen and the results highly satisfactory.

Fergus County High School offered Smith-Hughes home economics for first and second year. The course of study suggested in Form 44 (See Montana State Plans for Vocational Education) was used. Three home economics teachers were employed. Each gave part of her time to Smith-Hughes home economics. In addition home economics was given to students electing teacher-training courses and some home eco-

*In the district high schools where Home Economics is given in the grades grade work was supervised also.



Class in Home Economics—Clothing. Fergus County High School, Lewistown, Montana. F. L. Cummings, Principal

nomics was offered to third and fourth year students. The related art work has been taught by one of the home economics teachers who has had special preparation in art. The related science, biology, has been taught by the regular biology teacher.

Because of very crowded conditions (the building of the Fergus County High School was destroyed by fire in the spring of 1918 and barracks were erected to house the students) it has been necessary to allow some of the students to come for only one hour at a time and then return later for the second hour's work. Too, it has been necessary to admit students other than those regularly enrolled in Smith-Hughes home economics to the Smith-Hughes classes. However, the work planned has been adapted to the Smith-Hughes students. When the new building is finished this arrangement will not be necessary. Foods work has been taught by the meal plan method and excellent results have been obtained. Some fine work has been accomplished in clothing construction.

Fergus County High School is a pioneer in the movement to hire a home economics teacher on the twelve month basis. This is the second year that the arrangement has been in effect in this school.

Gallatin County High School offered Smith-Hughes home economics to one group of first year students. Foods was the home economics subject and general science the related subject. It was impossible to offer this course to more than one group of students because of the very heavy schedule of the general science teacher. In the foods class this group completed the bread club project as outlined in the state club bulletin. An opportunity was thus provided for simple home project work. The home economics teacher reported that the foods group taking general science showed the effect of this study in their food classes, their knowledge of chemical processes, temperatures, etc., was so much more definite than that of the other groups taking food work.

Wibaux County High School offered the Smith-Hughes course in home economics for the first year high school students, following the course suggested in Form 43 (See page 41, State Plans for Vocational Education). The home economics teacher gave all the related work as well as the home economics work. The students showed an unusual interest in the related art work. In the clothing work made over problems received considerable attention and some time was given to the construction of clothing for children. Many of these garments were from flour sacks. There is an excellent home economics library and the department has several magazines for the use of the students and instructor.

Outstanding Features of Other Departments Visited

Good work was observed at all schools visited. Some of the outstanding features are noted below:

Broadwater County High School—Although this was the first year for home economics in this school the character of the work has been excellent. An interesting problem observed was a straight line draft for a plain shirtwaist from which the students were to correct commercial patterns for middies. Several girls reported that the home economics course was the feature that attracted them to the school this year.

Butte—The foods work in the high school has proven so attractive to students that more students enrolled than could be handled by one foods teacher with one laboratory so an entire group was persuaded to substitute clothing work for this year. In the Junior high school, foods is required for one ninety minute period a week and may be selected for another ninety minute period. Practically all students have elected the extra period and report for the two laboratory periods a week.

Cascade has one of the most conveniently arranged departments observed. The rooms are pleasant and well lighted.

Columbia Falls included some work in house furnishing to all students enrolling in home economics work in the high school.

Columbus High School—Interest in foods work was stimulated by allowing girls to prepare food in large quantities and to buy the product at cost. Thus, if cakes was the problem, the full recipe was used and the students purchased the product.

Custer County High School has very crowded conditions for work. The home economics courses have proved so popular that both the foods and clothing laboratories were much crowded. Meal service has been featured in the foods course given here. In the fall orders were taken for canned products and students thus learned to meet commercial standards.

Cut Bank—This is a new department this year. Very good equipment was installed. A bulletin board in the kitchen included space for students to enter home work done and the results obtained thus stimulating an interest in home practice.

Flathead County has a woman to take charge of the school lunch. She comes for two or three hours a day and prepares the lunch under the direction of the home economics teacher. Any food prepared in quantity in the home economics classes is sold to the lunch room. Thus home economics teachers and pupils do not have the whole burden of preparing and serving the lunch, but, at the same time, this plan provides an opportunity for the students to have some valuable experience in quantity cooking. Too, it makes it possible for students and teachers to have a nutritious hot lunch at a minimum cost.

Fromberg—Because of the fact that the department was new and a good deal of money had been expended for equipment, the home economics department undertook to reduce to a minimum the expense

of operating the foods classes. The school bought staples as flour, spices, etc., and the students provided the milk, sugar, eggs, etc., and then took the cooked products home. This made possible the preparation of food in family size quantities.

Hardin—A new department has been installed here this year. Outstanding features of the equipment are a very fine local gas plant and a lavatory in the kitchen. The home economics unit consists of a foods laboratory and storeroom, a dining room, and a clothing laboratory. One edition of the school paper, the Big Horn, was edited by the home economics department. The home economics students have adopted a simple pink gingham dress as a uniform.

Harlowton—Excellent courses were given here in house planning and furnishing, also in millinery. Although facilities for work were meager (only one small room was available for all grade and high school work in home economics) a very good quality of work was produced.

Hysham—Excellent colored plates illustrating good designs in costume and in house furnishing were posted in the clothing laboratory. The instruction given has been adapted to the needs of the community in a very admirable manner.

Lavina—This is the first year for home economics work and the department is very meagerly equipped as yet. A very good start has been made and the special needs of the students have been considered.

Missoula County High School—The clothing work offered in this high school is outstanding. Emphasis is given to clothing economics and clothing design as well as to clothing construction. A high standard is required and obtained in the construction work and the interest in the processes is very keen. Textile is a live subject here. Related art parallels the clothing work. The clothing teacher gives the related art to one group of first year clothing students, the art teacher gives it to the other groups. This year, because the art teacher and the clothing teacher had such heavy schedules, no course in House Planning and Furnishing was offered. At the beginning of the second semester a group of fifteen students requested that such a course be given. The school complied with their request and a trained art teacher in the town was secured to give the work. This is evident of the interest that obtains in the home economics work here.

Sweet Grass County—This year a six weeks' course in foods, and a similar course in clothing, was offered to the women of the town. Of the nine women who enrolled in the foods course, six were women with families. Six of these women finished the course, the other three stayed for three weeks. The group met every day for ninety minutes. In Clothing three women enrolled and attended for five weeks.

In this school general science is required of all students electing home economics.

Teton County has had very crowded quarters. Excellent construction work has been done in clothing. During the winter months the home economics students prepared and served the school lunch and used the proceeds to help finance the department.

Thompson Falls has a very attractive, well kept department. For the year 1919-20 practically every girl in high school elected home economics.

Whitefish High School has a home economics cottage adjoining the school. All classes are held here so conditions at least approximate those found in a home. The cottage is quite complete, the living room, dining room and kitchen are on the first floor, and upstairs are the bedrooms, closets and bath.

Home Economics Conferences

Two conferences were held, one at Helena in November in connection with State Teachers' Association, the other in Billings, in March. A brief report of these conferences follow:

HELENA MEETING:

The home economics sectional conferences at the 1919 association meeting from the point of view of attendance, program and interest was the most satisfactory ever held in the state. About twenty-five home economics teachers were in attendance both Monday and Tuesday from 2 to 4 p. m. Four papers were presented, two each afternoon. A lively discussion followed the reading of the paper. Miss Emeline Whitcomb, head of the home economics department of the University of Montana at Missoula discussed the Course of Study in Home Economics. Miss Louise Christiansen, instructor in clothing in the Missoula High School, discussed the Teaching of Clothing in high school. Miss Olive Balcke, head of the home economics department, Fergus County High School, discussed the Teaching of Food Work by the Meal Plan Method, and Miss Lucile W. Reynolds, State Supervisor of Home Economics Education, discussed Problems in the Field.

BILLINGS CONFERENCE:

During the week that Miss Genevieve Fisher, Regional Supervisor of Home Economics for the Federal Board for Vocational Education, was in the state a district conference of home economics teachers was held in Billings. Invitations to attend this conference were sent out by the State Director of Vocational Education to all superintendents, principals and home economics teachers in towns accessible to Billings. Fourteen home economics teachers and six superintendents attended. An interesting feature was the fact that in practically every case school boards paid the expenses of the teachers and principals. A program based on the suggestions received from the teachers and superintendents in attendance was arranged. Miss Fisher and Miss Reynolds led the round table discussions and the teachers and principals in attendance contributed freely from their own experiences and observations.

Those present all agreed that the conference was most helpful and that they had received valuable suggestions in solving concrete problems. Next year, 1920-21 it is hoped that several such conferences may be arranged in various parts of the state.

Recommendations for 1920-21

HOME ECONOMICS DEFINED.

"Home Economics is a subject that centers around the problems of the home and other institutions whose problems are of similar nature. It includes study of food, shelter and clothing viewed from the standpoint of hygiene, economics and art and a study of the relations of the members of the family to each other and to society."

Home Economics, then, means more than cooking or sewing. These two activities are very useful and should form part of the program, but of themselves they do not provide a broad enough training in the problems of the home.

AIM OF HOME ECONOMICS IN HIGH SCHOOL.

The aim of Home Economics education is to train the girl to be a better house daughter. "Every girl today in her own home needs to know the principles governing healthful living for herself, her family and her community. In order to learn to live healthfully a girl should know how to select, prepare and use proper food and clothing, she needs to know about the sanitation of the dwelling in which she lives, the care of food and of clothing in their relation to health, the care of children and other members of her family.

She needs to learn to make plans for daily living through right opportunities for work, amusement, education, wise saving and spending.

THE COURSE OF STUDY IN HOME ECONOMICS.

There is no one course of study. "A good course of study in home economics for any school is the result of good judgment on the part of the teacher in weighing the relative values of all the studies of this group in relation to the aims or objectives and needs of her particular group of pupils at a particular time."

Teaching Home Economics, Cooley, Winchell, Spohr, Marshall.

PRELIMINARY SURVEY.

No one course of study is adapted to all types of pupils or schools. The details of a course for any school must be worked out by the individual teacher after she has made a survey of the sanitary, economic, and social conditions in the homes of her students.

Before planning a course the teacher should know what other subjects her students are taking in order that the work which she offers will correlate with, rather than duplicate that offered in other subjects. The essential thing to remember is that the course offered must meet a definite need in the lives of the students.

ARRANGEMENT OF COURSES.

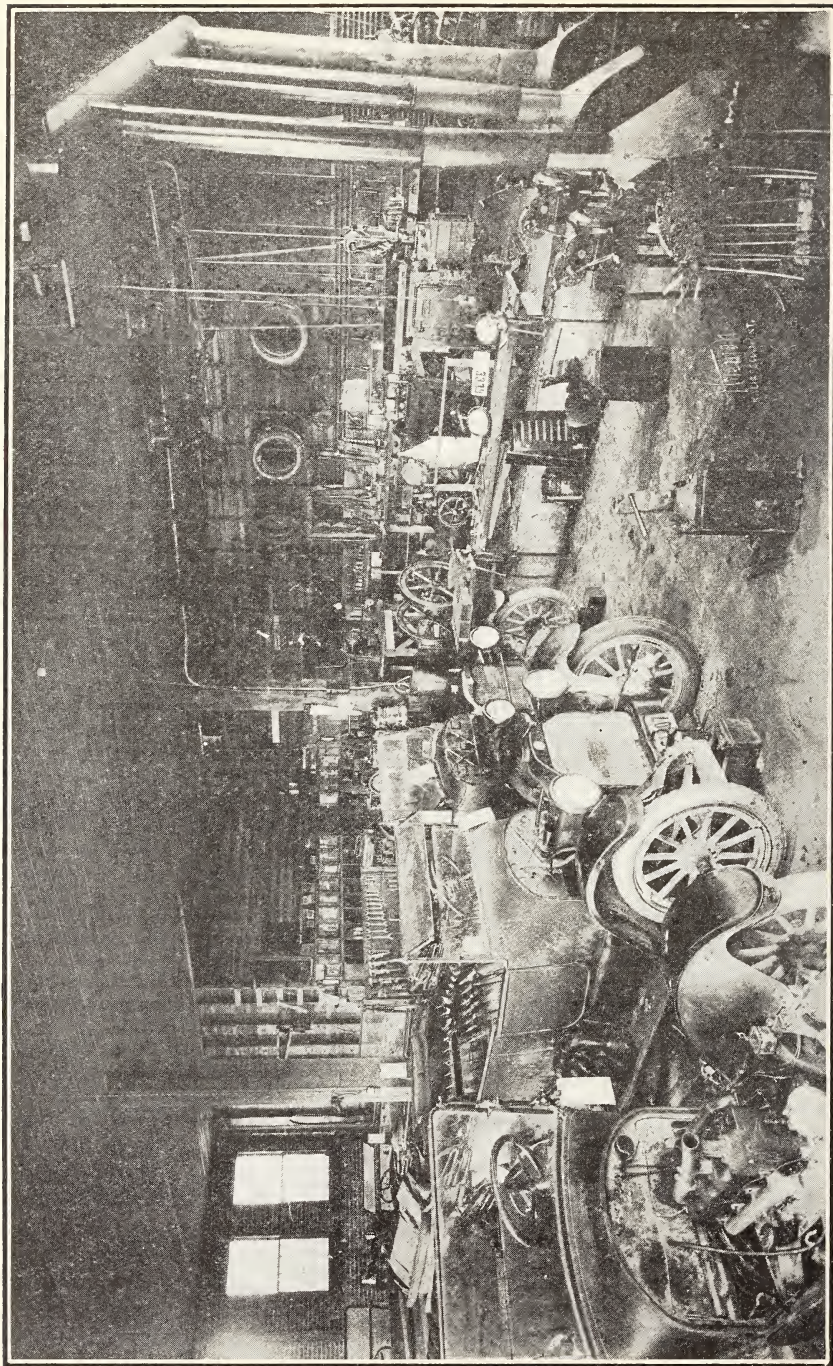
Three different types of courses in home economics are suggested in the State Plans for Vocational Education. (See Appendices 41, 43, 44). Even though the high school is not offering Smith-Hughes work in home economics and because of this does not require the related work, these courses are well arranged and will serve as a guide in making out the year's program.

In the majority of the Montana High Schools the largest enrollment in home economics courses is in the first and second years of high school. It is urged, then, that special emphasis be given to the content of the courses offered for these two years. In many schools the semester arrangement is preferred, that is, one semester's work in clothing is offered in the first and second years. Then if the student takes but one year's work she has a broader concept of her duties as a "house daughter" than if she took two semesters of clothing only. It is largely a question of "the greatest good to the greatest number."

LENGTH OF PERIODS, UNITS OF CREDIT.

Ten periods a week or one double period a day is essential for all laboratory subjects in home economics if effective work is to be accomplished. Foods, clothing, millinery, home management, laundry work, etc., are included here. This amount of time is necessary if a full credit is to be given. The 1920 report of the North Central Association says: "A unit course of study in a secondary school is defined as a course covering an academic year that shall include in the aggregate not less than the equivalent to one hour of prepared class room work."

It is earnestly recommended that every student who enrolls in a home economics course be required to take a year's work if she wishes to receive credit for the work done. Otherwise students will enroll for one semester's work in whatever phase of home economics they are especially interested and they will leave school with a very incomplete understanding of the aim of home economics education.



Auto Shop—Flathead County High School—Kalispell. F. O. Randall, Principal

TRADE AND INDUSTRY.**Report of State Supervisor for 1919-20.**

By L. R. FOOTE.

During the years 1917-18 and 1918-19 there was no regularly employed supervisor of trade and industrial education, who devoted any particular part of his time to this work. What supervision was done was through the department of public instruction which lent one of its members for a few visits to the various schools giving such work as could be recognized in trade and industry. In 1917-18 there was an all-day school in automobile mechanics. In 1918-19 there were two all-day schools in automobile mechanics and four evening classes at two centers in mechanical drawing.

Beginning July 1st, 1919, a supervisor of trade and industrial education was employed for one-half time and recognized and reimbursed schools have been in operation in all three lines of trade and industrial education, being two all-day schools, thirteen evening classes at six centers with part-time schools in three cities. The supervisor has visited these schools as frequently as his duties would permit.

ALL-DAY SCHOOLS

The all-day schools are two year courses in automobile mechanics. The school at Kalispell is in connection with the county high school and employs one shop teacher for full time and a related subjects teacher for two-thirds time. Mr. A. E. Ostroot is a practical mechanic and formerly was in charge of a garage and shop of his own. His classes have been extremely large and somewhat difficult to handle in the size of his shop. Mr. E. E. Romig is in charge of the related subjects which have been devoted chiefly to mechanical drawing and mathematics. The following is a summary of the work done at this school:

Number of jobs done for patrons of the shop—Over one hundred.
Amount of money received for jobs—\$331.

Character of jobs—Twenty-two auto engines overhauled; eight or ten stationary engines overhauled or repaired; ten transmission jobs; nine rear axle jobs; eight front axle jobs; eight generator jobs; seven radiator repair jobs; five light system jobs; ten battery overhaul jobs; a large number of batteries recharged, two dynamos kept constantly at work recharging batteries; one dynamo rebuilt, a large amount of vulcanizing done and a large number of other smaller jobs.

Where students are working and at what salaries—A number of our students are working at Walla Walla, Washington, some over on the coast; one boy is working in Columbus, Ohio. Wages have varied from \$17.00 per week to \$40.00 and even as high as \$50.00 per week.

Testimony of local people as to value of course—I have no written statements. Everywhere the course is highly regarded. The fact that we can take in only about one-third of those who wish to take the work would be regarded as the best evidence that it is meeting a real demand.

The type of course followed—The course is divided into different jobs, such as electrical work, rear axle work, front axle work, vulcanizing, blacksmithing work, general engine overhauling, and so on, and a boy taxes these as nearly in their order of ease as possible.

The Fergus County High School—The automobile course in this school has been in operation for two years. Mr. E. E. Musgrave who is in charge of the shop is a college graduate with a number of years of practical experience. The shop is large but incomplete, although it has always been full with cars and tractors awaiting repair. The number of young men who have enrolled for this course has been so large that Mr. Musgrave has had to devote his full time, both morning

and afternoon, to this shop. Mr. A. R. Bender has taught the related subjects. The following is a summary of the work done by this school:

No. of cars overhauled.....	54
No. of cars repaired.....	150
No. of different makes of cars overhauled.....	20
No. of tractors overhauled.....	2
No. of trips into country to start tractors and autos.....	10
No. of boys in garages or following the gas engineering work, such as running tractors, driving trucks or busses (some doing the latter work in the National Parks).....	15

EVENING SCHOOLS

There have been 13 classes conducted in the evening schools in various subjects related to the work of mechanics.

Klein—(This class studied electricity for miners and was supervised by Prof. R. T. Challender of Bozeman). The class at Klein was interrupted from time to time on account of influenza, but had a comparatively regular attendance. It is hoped that the plan we followed at Klein may be adaptable to other coal mining camps and that in the coming year several of these courses in electricity for miners may be organized.

Anaconda—In 1917-18 three classes were maintained in mechanical drawing with a total enrollment of 65. The classes this year were not organized until after the first of January. Sixty-one enrolled and were divided into three classes. The following is the list of occupations with the approximate number from each. There were two women enrolled who worked as tracers in the draughting department of the smelter:

6 blacksmiths.	2 machinists.
3 research laboratory.	8 repairmen in mill.
2 samplers.	2 leadburners.
1 pipefitter.	3 tracers.
4 bricklayers.	1 blast furnace operator.
2 electricians.	10 carpenters.
1 oiler.	3 ironworkers.
4 boilermakers.	

It is sad to record that just before the closing of the term for the mechanical drawing classes Mr. May died from an attack of pneumonia. He was an employee of the smelter, being a graduate from the School of Mines from the State of Michigan.

Butte—For the first time this year evening classes for mechanics were organized. Four different lines were undertaken, a class for carpenters in the operation of woodworking machines, a class for machinist apprentices in the operation of machines typical of that trade, a class in mechanical drawing and another in mathematics and machine sketching. The attendance has been somewhat irregular on account of the unsettled labor situation in Butte. The most regular attendance of any of the classes was that for machinists' apprentices who after working at their trade all day on their various types of machines would come regularly for attendance in the evening school. When these classes were first organized there were appeals from a large number of men to be admitted whose qualifications would not permit of it.

Miles City—After considerable difficulty the classes for the mechanics employed in the railroad shops were started. It may be of little interest to describe the plan followed in the organization of these classes. The State Director with Principal Woodard called on the superintendent and then the foreman of the shops and secured their cooperation with a day set when Principal Woodard was to appear in the shop at the noon hour and describe the proposed courses. Mr.

Woodard took with him enrollment cards and enrolled the young men who were interested and would like to take the course in mechanical drawing. Later the Director came to Miles City and assisted in the organization of two classes and the laying out of the plans for the work. While these classes have been interrupted by frequent change of teachers due to moving away, yet it has maintained a decided interest and has accomplished much good for the men in the shops.

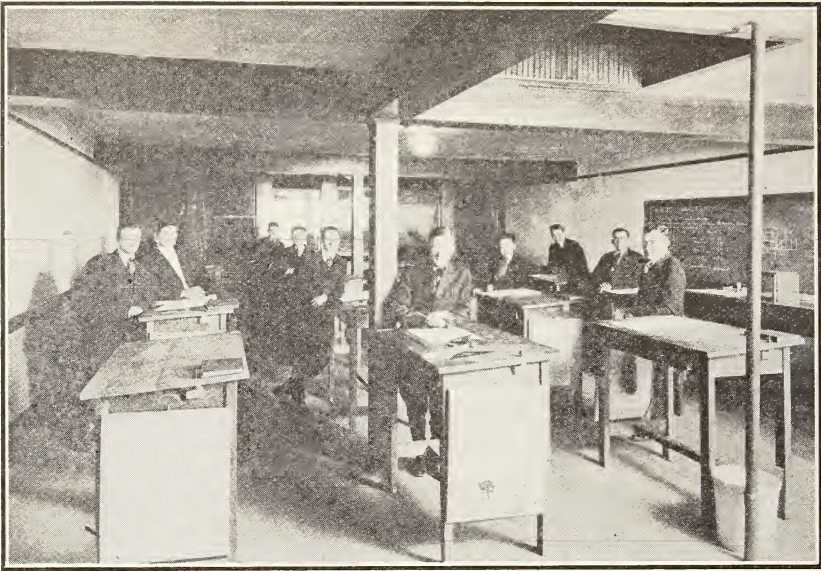
Livingston—Twenty-four young men, machinists apprentices, were enrolled in two classes here in mechanical drawing under Mr. Comstock of the high school. Superintendent Jackson of the N. P. shops was of material assistance in the organization of these classes.

Great Falls—In February the Director gave an address before the Women's Club of the city on the "Part Time School" and upon the invitation of the superintendent of the Great Northern shops talked to the apprentices for a half hour regarding the need of perfecting themselves in mechanical drawing and blue-print reading in their trade. About 30 days afterward Prof. R. T. Challender, teacher-trainer at the college, visited Great Falls and organized a class for the mechanics of the shop in charge of Mr. Fred Wiesner, the head draughtsman. While a large number enrolled, yet because of their inability to get instruments, only 22 have been counted as being regular students. These young men were drawn from the trades of machinists, boilermakers, carpenters and electricians. The school was held in an old building formerly used as the superintendent's office during the construction of the shops and was poorly heated, without the usual facilities of conducting a class. Yet in spite of these difficulties and the fact that the tables had to be made out of pine boards, raised up on artificial legs, the blackboard a large sheet of black boilerplate, the interest has been keen and attendance regular. At the time the supervisor visited this school the young men appealed to him for a longer term for another year and a greater variety of subjects, particularly shop mathematics.

Part-Time Schools.

The legislature of 1919 passed a compulsory part-time school law for first class districts having a population of 8,000 or more. There are only seven first class districts in the state: Anaconda, Billings, Butte, Great Falls, Helena, Lewistown and Missoula. In first class districts in which there is a county high school the school may be maintained by either the district or the county high school. In September, 1919, the first district to take advantage of the law was Butte. After considerable study of the best plan to house and establish the school, Superintendent Maddock with his co-ordinator, Mr. Warner, decided to operate the school from 8 to 9 a. m. and from 4 to 5 p. m., using certain teachers and the building of the Washington Junior High School. Classes were organized in general continuation subjects, sewing, bookkeeping, penmanship and arithmetic, sheet metal and wood working. Two classes in printing were organized as part-time classes in Trade Extension. This system was maintained throughout the year. Besides constant study of a necessary subject which has its scholastic value and nature of improvement, Co-ordinator Warner reports 8 or 10 completed the eighth grade and entered high school or will this coming semester.

Lewistown—Mr. Oscar Boland, teacher of commercial subjects in the Fergus County High School, was appointed co-ordinator and teacher. The district was thoroughly canvassed and all pupils of an age amenable to the part-time school were found and either placed in regular classes in the district schools of Lewistown or in high school classes in the Fergus County High School or special classes were organized in general continuation subjects. Fully 60 students were brought in touch with schools by this method, although only 15 were in specially organized reimbursed classes.



Evening School—Mechanical Drawing—Anaconda, Montana
W. K. Dwyer, Supt. (This is one of three classes)

Billings—At Billings the school began in January. The teacher of this school is Miss Florence Benson. The school began at 9 a. m., closing at 4 p. m. The students come to school at regular intervals for 45 to 60 minutes every day in the week; 49 different pupils were enrolled but at no time were there more than 10 pupils present. Besides the number of students who because of the part-time school law were forced into the high school or into a private school during the day there were 49 enrolled in this school.

Among the many interesting developments of this school is one which is worth reporting. A young lady who had obtained a position in a local store but had never learned to read or write had lost her position, enrolled in the part-time school and within four weeks was reading in the second reader and solving fractions in arithmetic. In the same school two Greeks who worked nights and who desired to learn the English language came to school in the morning. The methods of teaching employed here and the quality of the work done are very commendable.

Missoula—A thorough canvass of the district was made by the superintendent of the grade schools and the principal of the high school. A synopsis of this work will be found under the report of the director.

Great Falls—No part-time school was established here but a more strict enforcement of the compulsory school attendance laws was observed and only such students as completed the eighth grade even though they were over 16 years of age were given permission to remain out of school and work.

Helena—No report.

Anaconda—No report.

TEACHER TRAINING

Montana State College of Agriculture, Bozeman.

By M. J. Abbey, Professor of Agricultural Education.

AT COLLEGE:

The Department of Agricultural Education at the State College gave two courses in Agricultural Education during the winter quarter. The first was a course in Secondary Vocational Agricultural Education to meet the requirements of the Federal and State Vocational Acts. Course consisted of a study of the Smith-Hughes Act, relation of agricultural education to general education, organization of a course of study, methods of presenting subject matter in Animal Husbandry, crops, soils, dairying, poultry, and farm management, the project work, agricultural clubs, community work, supervised study, preparation of lesson plans, reports on observation teaching. Three hours credit. Twenty-five students in the class, made up of seniors and juniors. Eight of the men in the course are employed for next year. Other men were juniors or did not desire to take up teaching.

The second course was one in Extensive methods. A study of the Smith Lever Act, organization of County Agent work, the Farm Bureau, methods of cooperation, conducting community meetings, organization of rural agencies, preparation of county plans, the work of the specialist, written reports, discussions. Made up of seniors and juniors, twenty-five men in the class. Three hours credit. This course is a construction of the extension side of the first course. Six months of a Smith Hughes man's time is spent in the field.

During the spring quarter, two seniors prepared a thesis—subject "The Projects in Education". One student who had not had the course in Secondary Vocational Education, took this course.

ITINERANT TEACHERS TRAINING:

The state plans for Agricultural Education under the Smith Hughes Act call for this line of work. Twenty-five men, all college graduates, were registered in Secondary Vocational Agricultural Education. Each man was supplied with a set of notes (98 pages). These notes are the same as we use in one College class on the same subject. The instructor visited each student not less than three times during the year. The men were also brought together in groups at Glendive, Billings, Great Falls and Missoula. Methods of instruction the same as at the college. Eleven memos were issued during the year. These were upon special phases of teaching. Written reports were required. The instructor checked each man's teaching and results by the methods presented in lecture notes and at conferences. Principals of schools also reported to the instructor the progress of the men. All of these men were college graduates and were not intersted in college credit.

Two men, Jones of Harlowton and Diekman of Glendive left College before the end of the year but were able to complete their college work in June by registering in third quarter of Theory and Practice and Extension Methods in the Field. These men were assigned work in text, made reports, instructors visited these each three times from April 1st to June 10th. Each man also came to Bozeman and did class work for the last part of the course. Both men covered all or more than would have been covered at the College in the same period. Their principals made reports on the blank which is attached. We consider the Itinerant Teacher Training work the most valuable work which we did last year.

Next year several men will be employed in the high schools who are not Agricultural College graduates. This line of work will enable them to continue a limited amount of college work while they are employed.

TEACHER TRAINING IN HOME ECONOMICS.

By Alba Bales, Professor of Home Economics.

A. During the year ending June 30, 1920, the following courses were completed by seven students graduating in Home Economics under the Smith-Hughes requirement:

The special courses completed in the Junior year were General Psychology, Theory and Practice of Teaching, Development of Vocational Education; in the Senior year, Educational Psychology, Sociology, Special Methods of Home Economics Education, and Practice Teaching—a total of twenty-one points in Education.

In Home Economics, during the Junior year, Dietetics, and Household Administration (which includes Laundering, Household Management, Marketing and Accounts, Home Nursing, Menu Making and Serving of Meals); in the Senior year a special problem in the field of foods or clothing—a total of twenty-two points in foods. Costume Design, during the Junior year, Advanced Dressmaking and House Furnishing—a total of twelve points in clothing.

A number of the students completed two quarters of practice teaching or six points. Practice teaching was carried on in both the Gallatin County High School and the Junior High School of the City Schools. Classes in both foods and clothing were taught, the Gallatin County High School furnishing the larger field in foods, and the Junior High School furnishing the classes in clothing. One quarter of work was required, the second quarter being elective. Four students of the seven elected a second quarter of practice teaching.

B. During the year 1919-20 none of the instructors of the Home Economics Department left the college campus for any work in teacher training. Because of this fact we have no report in itinerant teacher training. There were several calls but funds were not granted for extension work in this line to be done.

(Signed.) ALBA BALES,

Professor of Home Economics.

TEACHER TRAINING IN TRADE AND INDUSTRY.

By R. T. Challenger, Professor of Trade and Industry.

AUTUMN QUARTER.

Subject.	Course	No.	Credits.	Pupils Enrolled.
Principles of teaching				
Trades and Industry	T. I.	15	3	1
Carpentry	T. I.	1	3	1

WINTER QUARTER.

Principles of teaching				
Trades and Industry	T. I.	15	3	1
Cabinet Work	T. I.	3	3	1
Carpentry	T. I.	2	3	1

SPRING QUARTER.

Pattern Work	T. I.	6	3	1
Agricultural Woodwork	T. I.	5	3	7

All courses were planned and given with the view of emphasizing the principles involved in the teaching of the several subjects to the type of classes which the pupils after leaving the institution were expecting to teach. Thus the course in Carpentry given during the Autumn and Winter Quarters was planned not only to give fundamental facts and practice in that line, but the ways of presenting, content, and features to be emphasized when teaching the same to prevailing types of classes to be met in the Smith-Hughes' field.

SUMMER SESSION.

Woodwork.....	T. I. 5	3	7
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This course requires twelve hours per week.

Other than Smith-Hughes' Classes.

AUTUMN QUARTER SEPT. 27 TO DEC. 19.

Subject	Course N.	Credits.	Section.	Pupils Enrolled.
Shop Work	M. E. 2	2	1	24
Shop Work	M. E. 2	2	2	20
Shop Work	M. E. 2	2	3	22
Carpentry	M. A. a	2	1	15
Carpentry	M. A. a	2	2	22

WINTER QUARTER, JAN. 3 TO MARCH 26.

Mechanical Drawing	M. A. k	2		42
Pattern Work	M. A. e	2		4
Carpentry	M. A. a	2	1	21
Carpentry	M. A. a	2	2	25

SPRING QUARTER, MARCH 27 TO JUNE 18.

Pattern Work	M. E. 2a	2		7
Mechanical Drawing	M. E. 1b	3		12
Mechanical Drawing	M. E. k	4		13
Carpentry	M. A. a	4		19
Shop Work	M. E. 2	2		3

SUMMER QUARTER, JUNE 21 TO JULY 30.

Carpentry	M. A. a	2		8
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Note. A credit calls for from 2 to 2½ hours of laboratory or shop work per week during the quarter or 1 hour of lecture, recitation, or quiz.

During the intervals when necessary to be gone from the institution on trips over the state, classes in Mechanical Drawing and Shop Work were handled by students from the senior class in Engineering.

TEACHER TRAINING IN HOME ECONOMICS.

By Emeline Whitcomb, Professor of Home Economics.

The State University of Montana graduated five teachers who completed the four-year course in Home Economics. This course conforms to the requirements made by the State Department of Public Instruction, and has the approval of Miss Genevieve Fisher, inspector of Smith-Hughes teacher training.

The description of the course is as follows:

Curriculum.

FIRST YEAR.

	Autumn Quarter Credits.	Winter Quarter Credits.	Spring Quarter Credits.
General Chemistry (11)	4	4	4
or			
Inorganic Chemistry and Qualitative Analysis (13)	5	5	5
History and Appreciation of Art (11)....	5		
College Education (10)	1		
Physical Education (11)	1	1	1
H. E. Foods (13ab)		5	5
English (11ab)		5	5
Economic Botany (14)	5		

SECOND YEAR.

	Autumn Quarter Credits.	Winter Quarter Credits.	Spring Quarter Credits.
Physiology of the Human Body (24)	4		
Household Physics (2)	4		
Modern Language	5	5	
H. E. Color and Design (12)	3		
H. E. Physical Education	1	1	1
Organic Chemistry (19)		5	5
H. E. Foods (21)		3	
Elementary Costume Design (14)		3	
Physiological Chemistry (103)			3
Textile Chemistry (105)			4
English			3
Elective			

THIRD YEAR.

	Autumn Quarter Credits.	Winter Quarter Credits.	Spring Quarter Credits.
General Bacteriology (19)	4		
General Psychology (11)	5	5	
H. E. Textile Study (117)	4		
History of Education (14)	3		
H. E. Advanced Costume Design (120) ..		4	
H. E. The House (19)		5	
Principles of Education (118)		3	
H. E. Educational Psychology (119)			3
H. E. Clothing (127)			5
H. E. Dietetics (122)			5
English			4

FOURTH YEAR.

	Autumn Quarter Credits.	Winter Quarter Credits.	Spring Quarter Credits.
The High School (122)	5		
H. E. Household Management (124)	5		
H. E. Health Education (123)	4		
Sociology (161)	3	3	
Education (126) Practice Teaching		3	3
School Hygiene (130)		3	
H. E. Foods (121)		3	
Economics (14)		3	3
Nutrition Seminar (237)			4
Electives			6

The past year it was possible to utilize the sorority houses as laboratories for Household Management. This arrangement is by no means satisfactory and a practice cottage is necessary in the near future.

The opportunities for practice teaching are also wholly unsatisfactory. Since our practice school is the Missoula County High School, the High School teachers in charge of Home Economics there are so meagerly compensated by the University for supervising our practice teachers that they are not willing to give our practice teachers sufficient teaching hours. What we hope for in the near future is to make the Home Economics teachers of the High School members of our Home Economics teaching staff, and thereby receive more consideration from them. At present we are mere guests in the High School, and hence take the few crumbs offered us.

Our curriculum for the training of teachers offers two quarters' work in observation and practice teaching. The course is listed in the Education Department, but the instruction shared by the departments of Education and Home Economics.

TABLE I.

REIMBURSEMENTS TO HIGH SCHOOLS FOR VOCATIONAL EDUCATION
FOR 1918-19 UNDER THE SMITH-HUGHES ACT AND THE
STATE ACT TO CONFORM THERETO.

Reimbursements in Agriculture.

Name of School	Total	State	Federal
Belt Valley H. S.....Belt	\$1,265.36	\$632.68	\$632.68
Dawson Co. H. S.....Glendive	1,055.86	527.93	527.93
Fergus Co. H. S.....Lewistown	1,391.02	695.51	695.51
Flathead Co. H. S.....Kalispell	1,374.82	687.41	687.41
Gallatin Co. H. S.....Bozeman	654.28	327.14	327.14
Harlowton H. S.....Harlowton	837.94	418.97	418.97
Jefferson Co. H. S.....Boulder	1,018.62	509.31	509.31
Powell Co. H. S.....Deer Lodge	670.44	335.22	335.22
Wibaux Co. H. S.....Wibaux	981.36	490.68	490.68
Total	\$9,249.70	\$4,624.85	\$4,624.85
For Supervision	750.00	375.00	375.00
Grand Total.....	\$9,999.70	\$4,999.85	\$4,999.85

Reimbursements in Trades and Industry.

Anaconda H. S.....Anaconda	\$ 270.00*	\$ 135.00	\$ 135.00
Fergus Co. H. S.....Lewistown	1,640.00	820.00	820.00
Flathead Co. H. S.....Kalispell	2,666.66	1,333.33	1,333.33
Powell Co. H. S.....Deer Lodge	144.00*	72.00	72.00
Total	\$4,720.66	\$2,360.33	\$2,360.00

*Evening classes.

Reimbursements in Home Economics.

Fergus Co. H. S.....Lewistown	\$ 668.32	\$ 334.16	\$ 334.16
Flathead Co. H. S.....Kalispell	328.92	164.46	164.46
Gallatin Co. H. S.....Bozeman	698.70	349.35	349.35
Wibaux Co. H. S.....Wibaux	303.82	151.91	151.91
Total	\$1,999.76	\$999.88	\$999.88

TABLE II.

EXPENDITURES FOR MAINTENANCE OF TEACHER TRAINING AND
SUPERVISION.

Agriculture.

	State Funds	Federal Funds	Total
Salaries of Teachers.....	\$ 375.00	\$ 375.00	\$ 750.00
Clerical Service	86.00	86.00	172.00
Light and Heat .....	.....	.....	.....
Travel	524.54	524.53	1,049.07
Communication	40.85	40.86	81.71
Rent .....	.....	.....	.....
Printing	23.38	23.37	46.75
Supplies	31.90	31.90	63.80
Janitor Service .....	.....	.....	.....
	\$1,081.67	\$1,081.66	\$2,163.33

Home Economics.

Salaries of Teachers or Supervisors.....	\$2,145.82	\$2,145.81	\$4,291.63
Clerical Service	39.32	39.33	78.65
Light and Heat	13.50	13.50	27.00
Travel	33.70	33.70	67.40
Communication	9.00	9.00	18.00
Rent	120.00	120.00	240.00
Printing	52.66	52.67	104.33
Supplies	98.97	98.97	197.94
Janitor Service	2.00	2.00	4.00
	\$2,514.97	\$2,514.98	\$5,029.95

SECOND ANNUAL REPORT

Total Agriculture and Home Economics.

Salaries of Teachers or Supervision.....	\$2,520.82	\$2,520.81	\$5,041.63
Clerical Service	125.32	125.33	250.65
Light and Heat	13.50	13.50	27.00
Travel	558.24	558.23	1,116.47
Communication	49.85	49.86	99.71
Rent	120.00	120.00	240.00
Printing	76.04	76.04	152.08
Supplies	130.87	130.87	261.74
Janitor Service	2.00	2.00	4.00
	<u>\$3,596.64</u>	<u>\$3,596.64</u>	<u>\$7,193.28</u>

BALANCE ON HAND IN FEDERAL FUND AT CLOSE OF FEDERAL
FISCAL YEAR, JUNE 30, 1919.

	Federal Funds
Salaries of Teachers of Agriculture in H. S.....	\$.15
Salaries of Teachers of Trade and Industry Part-time Schools.....	1,666.67
Teacher Training Funds	1,403.36
	<u>\$3,070.18</u>

TABLE III.
FINANCIAL STATEMENT.
Agriculture—Reimbursed Schools.

Name of School	Location	Names of Teachers of Agriculture	Total Annual Salary	Portion of Total Time to Agriculture	Amount Reimbursed From		
					State	Federal	Total
Belt Valley H. S.	Belt	Max. Fildbaum	\$2,000.00	100	\$ 444.44	\$ 555.56	\$1,000.00
Dawson Co. H. S.	Glendive	C. A. Lodge	1,800.00	100			
Fergus Co. H. S.	Lewistown	Herman Winzenburg	1,800.00	100	444.44	555.56	1,000.00
Plathead Co. H. S.	Kalispell	L. M. Wineman	1,800.00	100			
Gallatin Co. H. S.	Bozeman	H. C. Pope	1,800.00	50	444.45	555.55	1,000.00
		C. A. Carlson	1,700.00	100	444.44	555.56	1,000.00
		J. E. Borden	2,400.00	100			
Harlowton H. S.	Harlowton	L. Ross Johnson	1,400.00	100	444.45	555.55	1,000.00
		Paul C. C. Wagner	1,450.00	100			
Jefferson Co. H. S.	Boulder	Nell R. Jones	1,900.00	100	444.44	555.56	1,000.00
Powell Co. H. S.	Deer Lodge	W. G. Hunter	1,800.00	100	444.45	555.55	1,000.00
Wibaux Co. H. S.	Wibaux	Ray E. Cannon	1,800.00	100	444.45	555.55	1,000.00
		E. G. Axtell	1,800.00	100	444.44	555.56	1,000.00
Total			\$22,390.00		\$4,000.00	\$5,000.00	\$9,000.00

TABLE IV.
FINANCIAL STATEMENT.
Agriculture—Schools Not Reimbursed.

Name of School	Location	Names of Teachers of Agriculture	Total Annual Salary	Portion of Total Time to Agriculture
Cascade H. S.....	Cascade	J. W. Gray.....	\$2,100.00	100
		Glenn C. Smith.....		
Chinook H. S.....	Chinook	Chas. Koller	1,975.00	100
Columbus H. S.....	Columbus	A. N. Browning.....	1,800.00	.....
Fairview H. S.....	Fairview	Ralph D. Mercer.....	2,000.00	85
Geraldine H. S.....	Geraldine	C. S. Linton.....	1,800.00	2-3
		Daniel B. Noble.....	1,800.00	60
Hamilton H. S.....	Hamilton	N. A. McAnlay.....	1,500.00	40
Hardin H. S.....	Hardin	C. G. Fry.....	1,900.00	50
Lincoln Co. H. S.....	Eureka	W. H. Seubert.....	1,800.00	.....
Polson H. S.....	Polson	C. M. Nieman.....	1,666.66	50
Poplar H. S.....	Poplar	John Dexter	1,800.00	100
		H. F. DePue.....		
Sidney H. S.....	Sidney	Earl W. Chattin.....	1,812.00	31-40

TABLE V.
FINANCIAL STATEMENT T—HOME ECONOMICS.
All-Day Schools.

Name of Schools	Location	Names of Teachers	Total Salary of Teacher	Portion of Total Time to Vocational Home Eco- nomics	Amount Reimbursed from		
					State	Federal	Total
Dawson Co. H. S.....	Glendive	Mrs. Menke	\$1,250.00	100	\$ 260.86	\$ 260.87	\$ 521.73
Fergus Co. H. S.....	Lewistown	Olive Belcke	1,750.00	100	478.25	478.24	956.49
		Elizabeth Burton ..	1,500.00	$\frac{1}{2}$ & $\frac{1}{2}$			
		Florence Justin	1,600.00	$\frac{1}{2}$			
Gallatin Co. H. S.....	Bozeman	Madge Switzer	1,650.00	$\frac{1}{3}$	86.97	86.97	173.94
Wibaux Co. H. S.....	Wibaux	Gertrude Walker ...	1,400.00	100	173.92	173.92	347.84
Totals			\$9,150.00		\$1,000.00	\$1,000.00	\$2,000.00

Evening Schools—None.
Part-time Schools—None.

TABLE VI.
FINANCIAL STATEMENT—TRADE AND INDUSTRY.
Evening Schools.

Name of School	Location	Names of Teachers	Subjects	Total Salary of Teachers	Portion of Total Time to Vocational Trade and Industry	Amount Reimbursed from	
						State	Federal
Butte H. S.	Butte	H. L. Bradford	Mechanical Drawing	\$ 132.00	100	\$36.25	\$335.75
Butte H. S.	Butte	C. H. Forbes	Sketching and Math.	138.00	100		\$432.00
Butte H. S.	Butte	Louis Kilbren	Machinery	207.00	100		
Butte H. S.	Butte	C. Warner	Director and Teacher	300.00	100		
Custer Co. H. S.	Miles City	A. L. Carmen	Mechanical Drawing	12.00	100	120.00	120.00
Custer Co. H. S.	Miles City	A. J. Conrad	Mechanical Drawing	18.00	100		
Custer Co. H. S.	Miles City	W. F. McGrath	Mechanical Drawing	45.00	100		
Custer Co. H. S.	Miles City	J. A. Robinson	Mechanical Drawing	45.00	100		
Great Falls H. S.	Great Falls	Fred Wiesner	El. Mech. Drawing	72.00	100	72.00	72.00
Klein Even. School	Klein	A. W. Townsley	Elec. for Miners	44.75	100	31.50	31.50
Park Co. H. S.	Livingston	W. H. Comstock	Trade Drawing	108.00	100	108.00	108.00
Anaconda Ev. School	Anaconda	Karl May	El. Mech. Drawing	360.00	100	216.00	216.00
Totals				\$1,601.75		\$367.75	\$611.75
							\$979.50

TABLE VII.
FINANCIAL STATEMENT—TRADE AND INDUSTRY.
All-Day Auto Schools.

Name of School	Location	Names of Teachers	Subjects	Total Salary of Teachers	Portion of Total Time to Vocational Trade and Industry	Amount Reimbursed from	
						State	Federal
Flathead Co. H. S.	Kalispell	A. E. Ostreeth E. E. Romig	Shop Related	\$1,800.00 1,800.00	100 66%	\$ 923.35	\$ 923.35
Fergus Co. H. S.	Lewistown	E. E. Musgrave A. R. Bender	Shop Related	1,980.00 1,680.00	100	744.24	744.24
Totals				\$7,260.00		\$1,667.59	\$1,667.59
							\$1,846.70 1,488.48 \$3,335.18

TABLE VIII.
FINANCIAL STATEMENT—TRADE AND INDUSTRY.
Part-Time Schools—Trade Extension.

Name of School	Location	Name of Teacher	Subject	Total Salary of Teacher	Portion of Total Time to Vocational Trade and Industry	Amount Reimbursed From State and Local
Butte H. S.	Butte	O. G. Wood	Printing	\$379.50	100	\$189.75

TABLE IX.
FINANCIAL STATEMENT—TRADE AND INDUSTRY.
Part-Time Schools.

Name of School	Location	Names of Teachers	Subjects	Total Salary of Teacher	Portion of Time to Vocational Trade and Industry	Amount Reimbursed from		
						State	Federal	Total
Butte H. S.	Butte	L. D. Bell	Woodwork	\$172.50	100			
Butte H. S.	Butte	F. E. Davis	Woodwork	187.50	100			
Butte H. S.	Butte	W. A. Gates	Metal Work	369.00	100			
Butte H. S.	Butte	R. F. Hodgkiss	Sewing	199.50	100			
Butte H. S.	Butte	Josie Killett	Grade	85.50	100			
Butte H. S.	Butte	Catherine Quill	Bookkeeping	201.00	100			
Butte H. S.	Butte	Cora Ousley	Grade	175.75	100			
Butte H. S.	Butte	Margaret Sullivan	Bookkeeping	195.50	100			
Butte H. S.	Butte	O. G. Wood	Printing	379.50	100			
Butte H. S.	Butte	Anna Cliff	Clerk and Grade	873.33	100			
Butte H. S.	Butte	Carl Warner	Co-ordinator	450.00	100			
Billings H. S.	Billings	Florence Benson	Grade	462.00	100	\$ 77.64	\$716.50	\$716.50
Fergus Co. H. S.	Lewistown	Boland	Grade	450.00	100	340.00	255.66	333.30
							115.00	455.00
Totals						\$417.64	\$1,087.16	\$1,504.80

TABLE X.
STATISTICAL REPORT.
Agriculture—Reimbursed Schools.

Name of School	Location of Portion of Time of Teacher to Voc. Agricul.	No. Weeks in Session	Length of Agricultural Course	*Enrollment in Vocational Agriculture	Living on Farm	Not Living on Farm	Projects at Home	Projects at School	Projects Elsewhere
Belt Valley H. S.	100	36	4	16	13	3	15	14	3
Dawson Co. H. S.	100	36	4	22	22	0	0	18	4
Fergus Co. H. S.	100	38	4	28	17	7	24	24	0
Flathead Co. H. S.	100	36	4	27	4				
Gallatin Co. H. S.	100	36	4	14	12	2	16	19	0
Harlowton H. S.	100	36	2	18	15	3	10	1	4
Jefferson Co. H. S.	100	36	4	15	9	6	10	0	5
Powell Co. H. S.	100	38	4	27	20	7	25	27	0
Wibaux Co. H. S.	100	36	4	21	16	5	27	4	0
Totals				198	136	35	131	107	16

*No one counted more than once.

†No report.

TABLE XI.
STATISTICAL REPORT.
Agriculture—Schools Not Reimbursed.

Name of School	Location	Portion of Time of Teacher to Agriculture	No. Weeks in Session	Length of Agricultural Course	*Enrollment in Vocational Agriculture	Living on Farm	Not Living on Farm	Projects at Home	Projects at School	Projects Elsewhere
Beaverhead Co. H. S.	Dillon	¶	32	...	18	8	5	11	13	1
Cascade H. S.	Cascade	100	36	4	13	16	4	10	4	0
Chinook H. S.	Chinook	100	36	2	20	9	0	0	0	0
Columbus	Columbus	100	36	1	11	18	2	18	0	0
Fairview Cons.	Fairview	100	36	4	20	9	0	9	0	0
Geraldine H. S.	Geraldine	¶	36	4	10	...	...	...	...	...
Philpsburg	Philpsburg	60	36	4	11	29	11	6	0	0
Hamilton H. S.	Hamilton	100	36	4	15	9	6	15	0	0
Hardin H. S.	Hardin	100	36	4	17	14	3	12	0	0
Polson H. S.	Polson	50	36	4	17	14	3	12	0	0
Poplar Public School	Poplar	100	36	4	16	16	0	10	0	0
Lincoln Co. H. S.	Eureka	5-7	36	1	10	7	3	0	10	0
Sidney H. S.	Sidney	31-40	36	1	9	9	0	8	0	0
Worden H. S.	Worden	¶	36	1	27	7	0	0	0	0

*No one counted more than once.

†Enrolment for second year taken at the end of first year.

‡Expected to give 4 years.

¶No report.

TABLE XII.
STATISTICAL REPORT—HOME ECONOMICS.
All-Day Schools.

Name of School	Location	Names of Teachers	Portion of Teachers' Time to Vocational Home Economics	Length of Periods in Minutes	Enrollment
Dawson Co. H. S.	Glendive	Mrs. Menke	100	90 & 45	*29
Fergus Co. H. S.	Lewistown	Olive Balch	100	90 & 45	95
		Elizabeth Burton	1½-1½	90 & 45	
Gallatin Co. H. S.	Bozeman	Florence Justin	50%	90 & 45	
Wibaux Co. H. S.	Wibaux	Madge Switzer	1½	90 & 45	20
		Gertrude Walker	100	90 & 45	13
Total					157

Evening Schools—None.

Part-time Schools—None.

*No one counted more than once.

TABLE XIII.
STATISTICAL REPORT—TRADE AND INDUSTRY.
Evening School.

Name of School	Location	Teachers	Subjects	No. of Evenings Sessions	No. Hours Each Session	Enrollment	Average Attendance
Anaconda H. S.	Anaconda	Karl May	El. Mech. Drawing	*6	*6	61	54
Butte H. S.	Butte	H. L. Bradford	Drafting	68	2	28	10
Butte H. S.	Butte	C. H. Forbes	Sketch and Math.	68	2	31	10
Butte H. S.	Butte	Louis Kilber	Machinery	68	2	15	13
Butte H. S.	Butte	Carl Warner	Director and Teacher	36	2	13	2
†Custer Co. H. S.	Miles City	A. L. Carman	Mechanical Drawing	4	2	12	8
Custer Co. H. S.	Miles City	A. J. Conrad	Mechanical Drawing	6	2	12	8
Custer Co. H. S.	Miles City	W. F. McGrath	Mechanical Drawing	15	2	8	8
Custer Co. H. S.	Miles City	J. A. Robinson	Mechanical Drawing	15	2	22	16
Great Falls H. S.	Great Falls	Fred Wiesner	Elem. Mech. Drawing	24	2	23	13
Klein Evening School	Klein	A. W. Townsley	Elec. for Miners	17	1 3/4	23	10.5
Park Co. H. S.	Livingston	W. H. Comstock	Trade Drawing	24	2	12	10.5
Park Co. H. S.	Livingston	W. H. Comstock	Trade Drawing	24	2	12	10.5
Total						234	

*Three classes of two evenings and two hours each.

†Custer county had two classes of 12 each.

TABLE XIV.
TRADE EXTENSION—TRADE AND INDUSTRY.
Part. Time.

Name of School	Location	Name of Teacher	Subject	Hours of Instruction	Enrollment	Average Attendance
Butte H. S.	Butte	O. G. Wood.....	Printing	133	17	9.3

TABLE XV.
GENERAL CONTINUATION—TRADE AND INDUSTRY.
Part-Time.

Name of School	Location	Names of Teachers	Subjects	Hours of Instruction	Enrollment	Average Attendance
Billings, H. S.	Billings	Florence Benson	Grade	9-5	9	5
Butte, H. S.	Butte	L. D. Bell	Woodwork	115	14	6
Butte, H. S.	Butte	F. E. Davis	Woodwork	125	13	10
Butte, H. S.	Butte	W. A. Gates	Metal Work	*246	13	5
Butte, H. S.	Butte	R. F. Hodgkiss	Sewing	133	9	9
Butte, H. S.	Butte	Josie Kelleff	Grade	57	15	8
Butte, H. S.	Butte	Catherine Quill	Bookkeeping	134	12	4
Butte, H. S.	Butte	Cora Owsley	Grade	117	11	5.7
Butte, H. S.	Butte	Margaret Sullivan	Bookkeeping	130	11	9.3
Butte, H. S.	Butte	O. G. Wood	Printing	*253	17	5
Butte, H. S.	Butte	Anna Cliff	Clerk and Grade Teacher	118	9	
Butte, H. S.	Butte	Carl Warner	Co-ordinator			
Fergus Co. H. S.	Lewistown	O. Boland	Commercial	†		

*Two classes—one at 8 p. m. and one at 4 p. m.

†Two hours for each subject.

TABLE XVI.
STATISTICAL REPORT—TRADE AND INDUSTRY.
All-Day Automobile Schools.

Name of School	Location	Names of Teachers	Subjects	No. Hours Per Week	Enrollment	Average Attendance
Fergus H. S.	Lewistown	E. E. Musgrave A. R. Bender	Shop Applied Science, Math.- Mech. Drawing	30	61	50
Flathead H. S.	Kalispell	A. E. Ostroot E. E. Romig	Shop Mech. Drawing, Shop Drawing, Science	10 30 20	51	35
Total					112	

TABLE XVII.
SUMMARY—FINANCIAL STATEMENT.

	Agriculture for Salaries, Supervisors, and Director	Trade, In- dustry and Home Eco- nomics for Teachers	Teacher Training; Tenance of Teacher Including Supervision	Total
Receipts and Expenditure of Federal Money; Balance of Federal Money in State Treasury				
Receipt of Federal Money During the Year:				
First Quarter	\$.15	\$ 1,666.67	\$ 1,403.36	\$ 3,070.18
Second Quarter	1,249.85	0	1,096.64	2,346.49
Third Quarter	1,250.00	\$33.33	2,500.00	4,583.33
Fourth Quarter	1,250.00	1,250.00	2,500.00	5,000.00
	1,250.00	1,250.00	2,500.00	5,000.00
Total of Balance and Receipts	\$ 5,000.00	\$ 5,000.00	\$10,000.00	\$20,000.00
Expenditure of Federal Money for Reimbursement of Ex- penditures from State and Local Funds	\$ 5,000.00	\$ 5,000.00	\$ 8,990.05	\$18,990.05
Unexpended Balance of Federal Money in State Treasury June 30			\$ 1,009.95	\$ 1,009.95
Expenditure from State and Local Funds; Expenditure from State Funds not Reimbursed from Fed- eral Funds	\$ 4,000.00	\$ 3,750.98	\$ 8,990.06	\$15,741.04
Expenditure from Local Funds not Reimbursed from State or Federal Funds	8,745.24	10,378.52		19,123.76
Total Expenditure from State and Local Funds Not Re- imbursed	\$12,745.24	\$14,129.50	\$8,990.06	\$34,864.80
From Federal, State and Local Funds	\$17,745.24	\$19,129.50	\$17,980.11	\$54,854.85

